Name: Date:

FOIL when $A \neq 1$ solution (version 15)

FOIL the expressions shown below:

1. $(-8x - 5)(8x + 3)$

$$(-8)(8)x^2 + (-8)(3)x + (-5)(8)x + (-5)(3)$$
$$(-64)x^2 + (-24)x + (-40)x + (-15)$$
$$-64x^2 - 64x - 15$$

2. $(8x + 4)(2x + 5)$

$$(8)(2)x^2 + (8)(5)x + (4)(2)x + (4)(5)$$
$$(16)x^2 + (40)x + (8)x + (20)$$
$$16x^2 + 48x + 20$$

3. $(-5x - 5)(5x - 3)$

$$(-5)(5)x^2 + (-5)(-3)x + (-5)(5)x + (-5)(-3)$$
$$(-25)x^2 + (15)x + (-25)x + (15)$$
$$-25x^2 - 10x + 15$$

4. $(-5x + 6)(-5x - 7)$

$$(-5)(-5)x^2 + (-5)(-7)x + (6)(-5)x + (6)(-7)$$
$$(25)x^2 + (35)x + (-30)x + (-42)$$
$$25x^2 + 5x - 42$$

5. $(-7x + 4)(7x - 2)$

$$(-7)(7)x^2 + (-7)(-2)x + (4)(7)x + (4)(-2)$$
$$(-49)x^2 + (14)x + (28)x + (-8)$$
$$-49x^2 + 42x - 8$$

FOIL the expressions shown below:

6. $(4x-4)(5x-8)$

$$(4)(5)x^2+(4)(-8)x+(-4)(5)x+(-4)(-8)$$
$$(20)x^2+(-32)x+(-20)x+(32)$$
$$20x^2-52x+32$$

7. $(-9x+6)(2x+6)$

$$(-9)(2)x^2+(-9)(6)x+(6)(2)x+(6)(6)$$
$$(-18)x^2+(-54)x+(12)x+(36)$$
$$-18x^2-42x+36$$

8. $(-3x+5)(-8x-4)$

$$(-3)(-8)x^2+(-3)(-4)x+(5)(-8)x+(5)(-4)$$
$$(24)x^2+(12)x+(-40)x+(-20)$$
$$24x^2-28x-20$$

9. $(-6x-9)(-9x-2)$

$$(-6)(-9)x^2+(-6)(-2)x+(-9)(-9)x+(-9)(-2)$$
$$(54)x^2+(12)x+(81)x+(18)$$
$$54x^2+93x+18$$

10. $(2x-9)(-6x-7)$

$$(2)(-6)x^2+(2)(-7)x+(-9)(-6)x+(-9)(-7)$$
$$(-12)x^2+(-14)x+(54)x+(63)$$
$$-12x^2+40x+63$$